ABSTRACT

The invention provides a polymer composition containing an addition polymerization-based block copolymer (a), an acrylic resin (b), and a softener (c), wherein the addition polymerization-based block copolymer (a) has a weight average molecular weight of 30000 to 200000 and is at least one selected from block copolymers comprising at least one polymer block A and at least one polymer block B, and hydrogenated products of the block copolymers; the polymer block A essentially comprises an aromatic vinyl compound unit containing at least 1% by mass of an alkylstyrene-derived structural unit (I) in which at least one alkyl group having 1 to 8 carbon atoms is bound to a benzene ring; the block copolymer B comprises a conjugated diene compound unit; and the components of the polymer composition are present in respective proportions (by mass) so that the following relationships (1) and (2) hold:

$$0.05 \leq Wb/Wa \leq 2 \qquad (1)$$

$$Wc/(Wa+Wb+Wc) \leq 0.5 \qquad (2)$$

where Wa, Wb, and Wc are the amounts (by mass) of the components of the polymer composition: the addition polymerization-based block copolymer (a), the acrylic resin (b) and the softener (c), respectively.

Not only does the polymer composition of the present invention offer various advantageous properties, including moldability, flexibility, rubber elasticity, mechanical properties, and transparency, but it also exhibits superior scratch resistance and superior abrasion resistance, which make the polymer composition suitable for use in various applications.

(12)特許協力条約に基づいて公開された国際出願

13 APR 2005

(19) 世界知的所有権機関
国際事務局

(43) 国際公開日
2004 年5 月6 日 (06.05.2004)

PCT

(10) 国際公開番号
WO 2004/037922 A1

(51) 国際特許分類[7]: C08L 53/00, 33/00

(21) 国際出願番号: PCT/JP2003/013378

(22) 国際出願日: 2003 年10 月20 日 (20.10.2003)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(30) 優先権データ:
特願2002-309748
2002 年10 月24 日 (24.10.2002) JP

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(81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) 指定国 (広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

添付公開書類:
— 国際調査報告書

２文字コード及び他の略語については、定期発行される各*PCT*ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

WO 2004/037922 A1

(54) Title: POLYMER COMPOSITION

(54) 発明の名称: 重合体組成物

(57) Abstract: A polymer composition comprising at least one addition polymer type block copolymer (a) having a weight-average molecular weight of 30000 to 200000 which is selected from among block copolymers each comprising one or more polymer block (A) composed mainly of aromatic vinyl units containing at least 1% by mass of structural units (I) derived from an alkylstyrene having at least one C_{1-8} alkyl group bonded to the benzene ring and one or more polymer block (B) composed mainly of conjugated diene units and products of hydrogenation of the block copolymers, an acrylic resin (b), and a softener (c) in proportions (by mass) satisfying the relationships [1] and [2]: $0.05 \leq Wb/Wa \leq 2$ [1] $Wc/(Wa + Wb + Wc) \leq 0.5$ [2] [wherein Wa, Wb, and Wc are the contents (by mass) of the block copolymer (a), the acrylic resin (b), and the softener (c)]. The polymer composition is excellent in processability in molding, softness, rubber elasticity, mechanical characteristics, and transparency as well as in mar resistance and wear resistance, thus being effectively usable in a wide field by virtue of such properties.

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